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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/924,606

08/09/2001

Yoichi Oikawa

837.1969

5250

21171

7590

08/17/2004

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EXAMINER

PRASAD, CHANDRIKA


ART UNIT

PAPER NUMBER

2839

DATE MAILED: 08/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 09/924,606	Applicant(s) OIKAWA ET AL.	
	Examiner Chandrika Prasad	Art Unit 2839	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 03 August 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,34-39,41,43 and 44 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,34-39,41,43 and 44 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Response to Amendment***

1. The reply filed on 8/3/04 consists of amendments to claims 34, 37 and remarks related to rejection of claims. The claims are not allowable as explained below.

### ***Claim Objections***

2. Claim 1 objected to because of the following informalities: Line 7-8: relational operators are missing. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1, 34-39 and 43 are rejected under 35 U.S.C. 102(e) as being anticipated by Smith et al. (20020071627).

Smith (Figures 5-19) shows an optical switch with a plurality of inputs and outputs and a substrate with a size greater than the switch size defined by the inputs and outputs, first and second mirrors 70, 86 parallel to each other and perpendicular to the substrate, optical paths from the input and output ports being inclined to the mirrors and each of the switch cells 75 having a movable mirror 76. The reflecting mirrors 70, 86 are on opposite sides of the movable mirrors 76 and optical path lengths from input

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to output ports are equal, which result in optical losses from input to output ports being equal. The optical inputs from input ports to adjacent optical path switching means (cells) crossing each other.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 41 and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smith et al. (20020071627).

Smith shows all the features of these claims as described in Paragraph 4 above except adjacent ones of switching means (cells) reversed to each other or switches connected to input or output ports being alternatively reversed. The instant invention does not provide any specific reason or problem to be solved by this feature. It would have been obvious to one having ordinary skill in the art at the time of the instant invention to provide such a feature to Smith's switching means because this would require a mere change in orientation which involve only routine skill in the art.

***Response to Arguments***

7. Applicant's arguments with respect to claims have been considered but are moot in view of the new ground(s) of rejection.

***Contact Information***

8. Any correspondence to this action may be mailed to:

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**Commissioner for Patents  
Post Office Box 1450  
Alexandria, VA 22313-1450**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chandrika Prasad at (571) 272-2099.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor can be reached at (571) 272-2800 ext 39. The fax number is (703) 872-9306.



Chandrika Prasad  
Primary examiner  
August 12, 2004